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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,004	09/08/2003	Thomas W. Horjus	HOR 1.2-2	2290
7590 11/16/2004			EXAMINER	
Waters & Morse, P.C. 400 Ledyard Building 125 Ottawa, Avenue, NW Grand Rapids, MI 49503			KERSHTEYN, IGOR	
			ART UNIT	PAPER NUMBER
			3745	

DATE MAILED: 11/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/658,004	<b>Applicant(s)</b> HORJUS, THOMAS W.	
	<b>Examiner</b> Igor Kershteyn	<b>Art Unit</b> 3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,6,7,9 and 10 is/are rejected.
- 7) ☒ Claim(s) 5 and 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/24/2003</u> . | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Claim Objections***

Claim 1 is objected to because of the following informalities:

Claim 1 recites the limitation "the pole" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Schultz (3,930,750).

In figure 4, Schultz teaches a horizontal wind generator comprising: a horizontal windmill comprising: a generally vertical drive shaft (not numbered) mounted for rotation about a vertical axis; at least one wind drive unit mounted in a wind catching position on the drive shaft, the wind drive unit including a transverse cross member 11 non-rotatably attached to the drive shaft, and at least two wind catcher elements 2 mounted on the cross member 11 on opposite sides of the shaft and spaced radially outwardly therefrom, each wind catcher element 2 having front and rear sides, with the front side

Art Unit: 3745

presenting greater resistance to wind flow thereover than the rear side when the sides are facing in an upwind direction, the wind catcher elements 2 on each side of the cross member 11 facing in opposite directions, such that a wind urges the drive unit to rotate in a direction wherein the upward facing front side is moving in a downwind direction; and an electrical generator (not shown) drivingly connected to the drive shaft so as to produce electrical energy in response to the rotation of the drive shaft.

Claims 1-3, 6, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Huther (4,037,989).

In figures 1-4, Huther teaches a horizontal wind generator 10 comprising: a horizontal windmill 28 comprising: a generally vertical drive shaft 26 mounted for rotation about a vertical axis; at least one wind drive unit mounted in a wind catching position on the drive shaft 26, the wind drive unit including a transverse cross member 34,36,38,40 non-rotatably attached to the drive shaft 26, and at least two wind catcher elements 42,52 mounted on the cross member 34,36,38,40 on opposite sides of the shaft 26 and spaced radially outwardly therefrom, each wind catcher element 42,52 having front and rear sides 48, with the front side presenting greater resistance to wind flow thereover than the rear side 48 when the sides are facing in an upwind direction, the wind catcher elements 32,52 on each side of the cross member 34,36,38,40 facing in opposite directions, such that a wind urges the drive unit to rotate in a direction wherein the upward facing front side is moving in a downwind direction; and an

Art Unit: 3745

electrical generator 30 drivingly connected to the drive shaft 26 so as to produce electrical energy in response to the rotation of the drive shaft 26.

Claims 1, 2, 6, 7, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Black (4,321,005).

In figures 1-9, Black teaches a horizontal wind generator 10 comprising: a horizontal windmill comprising: a generally vertical drive shaft 52 mounted for rotation about a vertical axis; at least one wind drive unit 14 mounted in a wind catching position on the drive shaft 52, the wind drive unit 14 including a transverse cross member 46 non-rotatably attached to the drive shaft 52, and at least two wind catcher elements 50 mounted on the cross member 46 on opposite sides of the shaft 52 and spaced radially outwardly therefrom, each wind catcher element 50 having front and rear sides, with the front side presenting greater resistance to wind flow thereover than the rear side when the sides are facing in an upwind direction, the wind catcher elements 50 on each side of the cross member 46 facing in opposite directions, such that a wind urges the drive unit 14 to rotate in a direction wherein the upward facing front side is moving in a downwind direction; and an electrical generator (not shown) drivingly connected to the drive shaft 52 so as to produce electrical energy in response to the rotation of the drive shaft 52.

Claims 1, 2, 4, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Potter (4,382,191).

Art Unit: 3745

In figures 1-4, Potter teaches a horizontal wind generator 10 comprising: a horizontal windmill 12 comprising: a generally vertical drive shaft 14 mounted for rotation about a vertical axis; at least one wind drive unit mounted in a wind catching position on the drive shaft 14, the wind drive unit including a transverse cross member 34 non-rotatably attached to the drive shaft 14, and at least two wind catcher elements 36 mounted on the cross member 34 on opposite sides of the shaft 14 and spaced radially outwardly therefrom, each wind catcher element 36 having front and rear sides, with the front side presenting greater resistance to wind flow thereover than the rear side when the sides are facing in an upwind direction, the wind catcher elements 36 on each side of the cross member 34 facing in opposite directions, such that a wind urges the drive unit to rotate in a direction wherein the upward facing front side is moving in a downwind direction; and an electrical generator 28 drivingly connected to the drive shaft 14 so as to produce electrical energy in response to the rotation of the drive shaft 14.

### ***Allowable Subject Matter***

Claims 5 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Prior Art***

Prior art made of record but not relied upon is considered pertinent to Applicant's disclosure and consist of five patents.

Heyworth et al. (108,593) is cited to show a windmill having a vertical shaft and a drive unit including a transverse cross member and a C-shaped blade but fails to teach a generator.

Hensel (683,935) is cited to show a vertical axis wind turbine having a plurality of wheels arranged around the periphery of a shaft but fails to teach the shaft mounted for rotation.

Dunne (752,764) is cited to show a windmill having a vertical shaft and a drive unit including a transverse cross member and a C-shaped blade but fails to teach a generator.

Heidelberg (5,299,913) is cited to show a vertical axis wind turbine having a plurality of wheels arranged around the periphery of a shaft but fails to teach the shaft mounted for rotation.

German Patent DE-3832997-A1 is cited to show a windmill using a barrel-like blades but fails to teach a vertical shaft and cross members.

### ***Contact information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Kershteyn whose telephone number is (703) 308 8317. The examiner can be reached on Monday-Friday from 8:00 a.m. to 4:30 p.m.

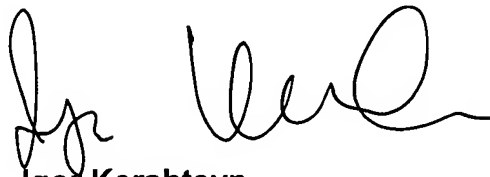
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look, can be reached on (703) 308 1044. The fax number is (703) 872-9306.

Art Unit: 3745

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308 0861.

IK

November 9, 2004



Igor Kershteyn  
Patent examiner.  
Art Unit 3745



F. DANIEL LOPEZ  
PRIMARY EXAMINER